Saves time (no more bagging and costly trips to the landfill)

Saves money (less fertilizer is needed)

Encourages a healthier lawn (clippings contain valuable nitrogen)

Saves valuable landfill space

Saves energy (hauling to the landfill)

California Environmental Protection Agency



Integrated Waste Management Board 8800 Cal Center Drive, MS 21 Sacramento, CA 95826 (916) 255-2200 http://www.ciwmb.ca.gov

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In 1995, Californians reached a milestone when 25 percent of the state's solid waste was reused, recycled or otherwise diverted from landfills. The Integrated Waste Management Board is working closely with local governments, industry, the environmental community, and the general public to reach the next goal—cutting half the trash by the year 2000. By reducing in half the amount of materials being disposed of, Californians will save energy, conserve natural resources, and extend the lifespan of existing landfills. Because "green waste" such as grass clippings comprises 15 percent of the total amount of waste generated each year, grasscycling, composting, and other measures every household can take are big steps in reaching that goal.

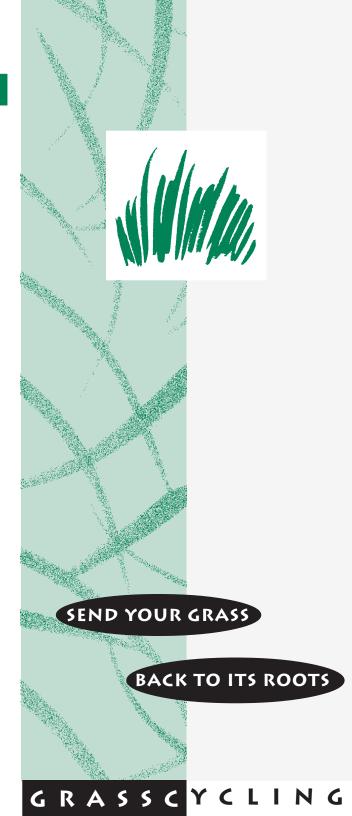
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GRASSCYCLING

Grass clippings make up a surprisingly large portion of California's waste stream during the growing season. Increasingly, California communities are looking toward "grasscycling" to reduce the amount of waste going to our landfills.

WHAT IS "GRASSCYCLING"?

Grasscycling is the natural recycling of grass by leaving clippings on the lawn when mowing. Grass clippings decompose quickly and release valuable nutrients back into the soil. Grasscycling is simple, easy, and it works!

Grasseycling can be practiced on any healthy lawn as long as proper turf management guidelines are followed. Unfortunately, many people treat their lawns like a "crop": they (over) water and (over) fertilize their lawns to encourage maximum growth. The "crop" (grass clippings) is then bagged and transported to a landfill. Proper mowing, watering, and fertilizing results in more moderate turf growth yet still produces a healthy, green lawn.

MOWING

Proper mowing is required for successful grasscycling. Cut grass when the surface is dry, and keep mower blades sharp. Follow the "1/3 rule": mow your lawn often enough so that no more than 1/3 of the length of the grass blade is cut in any one mowing. Frequent mowing will produce short clippings that will not cover up the grass surface. You may have to cut the lawn every

5 days when the lawn is growing fast but only every 7 to 10 days when the turf is growing slowly.

LISTED BELOW ARE PROPER MOWING HEIGHTS (IN INCHES) FOR VARIOUS TYPES OF GRASSES.

Grass Type	Mower Setting (inch)	Mow when grass reaches this height (inch)
Bent Grass	1/2 - 1	3/4 - 1 1/2
Bermuda Grass (common)	1 - 1 1/2	1 1/2 - 2 1/4
Bermuda Grass (hybrid)	1/2 - 1	3/4 - 1 1/2
Kentucky Bluegrass	1 1/2 - 2 1/2	2 1/4 - 3 3/4
Kikuyu Grass	1 - 1 1/2	1 1/2 - 2 1/4
Perennial Ryegrass	1 1/2 - 2 1/2	2 1/4 - 3 3/4
Tall Fescue	1 1/2 - 3	2 1/4 - 4 1/2
St. Augustine Grass	1 - 2	1 1/2 - 3
Zoysia	1/2 - 1 1/2	3/4 - 2 1/4

In many areas of California, raising the mowing height in the summer encourages deeper roots and protects grass from drought and heat damage.

You can grasscycle with almost any mower. The mower collection bag can be removed to allow clippings to drop on the lawn. However, if your mower does not have a safety flap covering the opening where the bag fits into the chute, contact your local retailer to purchase a retrofit kit. Some lawnmower manufacturers have developed mulching or recycling mowers that cut grass blades into small pieces and force them into the soil. These types of mowers are effective in grasscycling and have become very popular in many eastern states where yard wastes are banned at landfills. Several brands of recycling mowers are available in California.

WATERING

Turf grasses vary in their need for water. Most grasses in California need 1 inch of water every 5 to 7 days in the growing season and much less during months when growth is slow. Lawns watered too frequently tend to develop shallow root systems that may make them more susceptible to stress and disease. Deep, infrequent watering produces a deeper, more extensive root system which enables turf to resist disease and stress. Overwatering is not only wasteful, it also causes lawns to grow faster and requires more mowing.

The best time to water is early morning, as less water is lost due to evaporation. Try to avoid watering in the evening because it may encourage disease development.

FERTILIZING

Proper fertilization is essential in maintaining a healthy lawn. Overfertilization can weaken a lawn by causing excessive and succulent top growth. For moderate, even growth, use a combination of fast-acting fertilizers (ammonium nitrate, ammonium sulfate, or urea) and slow-release nitrogen sources such as sulfur-coated urea, urea formaldehyde, IBDU or organic fertilizers. Avoid using high quantities of fast-acting fertilizers. These fertilizers produce very fast growth for short periods. Regardless of the grass type and its nutrient needs, as a general rule it is better for the lawn, and for grasseveling, to apply smaller quantities of fertilizer more frequently rather than larger amounts less frequently. Grasscycling can reduce the amount of fertilizer needed by 15 to 20 percent because grass clippings return nitrogen to the soil.

COMMON QUESTIONS REGARDING GRASSCYCLING

Does Grasscycling Cause Thatch Build Up? No!

Research has shown that grass roots are the primary cause of thatch, not grass clippings. Thatch is composed primarily of roots, stems, rhizomes, crowns, and stolons. These plant materials contain large amounts of lignin (wood) and decompose slowly. Grass clippings are approximately 80 to 85 percent water with only small amounts of lignin, and decompose rapidly. Some turf grasses such as Bermuda grass and Kikuyu grass are more thatch-prone than others. A small amount of thatch (approximately 1/2 inch) is actually beneficial to a lawn, providing insulation to roots and serving as a mulch to prevent excessive water evaporation and soil compaction. It may also create a cushioning effect for lawn play.

DOES GRASSCYCLING SPREAD LAWN DISEASE? NO!

Improper watering and fertilizing have a much greater impact on disease spread than grasscycling. If a desirable environment for turf grass disease is present, infestation will occur whether clippings are collected or not!

WILL GRASSCYCLING MAKE MY LAWN LOOK BAD? NO!

If a lawn is properly mowed, watered, and fertilized, grasscycling can actually produce a healthier-looking lawn. It is important to cut the lawn frequently to produce small clippings that will decompose quickly. If a lawn is not cut frequently and clippings are left on the lawn, it will produce a "hay-like" look which can be unsightly.

Many golf courses and parks have practiced grasscycling for years. Ninety-eight percent of the participants in a grasscycling study conducted by Texas A&M reported that they will never bag their clippings again.

ARE THERE ALTERNATIVES TO GRASSCYCLING? YES!

Grasscycling is not appropriate in every situation. Prolonged wet weather, mechanical breakdown of mowers, or infrequent mowing are situations where grass clippings should probably be bagged since an excessive volume of clippings will be generated. But do not throw the clippings away!

Grass clippings are excellent additions to a backyard compost pile. Clippings can also be used as mulch to provide weed control and prevent moisture loss around flower beds, trees, and shrubs. (Mulching with clippings should be avoided, however, if they are of an invasive variety such as Bermuda grass, or if herbicides have been applied recently to the lawn).

Grass clippings are a valuable resource and simply should not be thrown away. For more information on grasscycling, contact the Integrated Waste Management Board's Hotline number at (800) 553-2962.



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